WHAT IS [redacted]MED IS:

1. An adhesive layer for use in an integrated circuit package for attaching a die to a solder ball array, the adhesive layer having:

a modulus of elasticity less than about 126 ksi at room temperature; and

a coefficient of thermal expansion (CTE) of less than about 200 ppm/°C.

2. The adhesive layer of Claim 1, wherein the die is selected from the group consisting of microprocessors, co-processors, digital signal processors, graphics processors, microcontrollers, memory devices, reprogrammable devices, programmable logic devices, and logic arrays.

3. The adhesive layer of Claim 1, wherein the modulus of elasticity is greater than about 10 ksi.

4. The adhesive layer of Claim 2, wherein the modulus of elasticity is greater than about 50 ksi.

5. The adhesive layer of Claim 4, wherein the modulus of elasticity is greater than about 100 ksi.

6. The adhesive layer of Claim 1, wherein the coefficient of thermal expansion is less than about 150 ppm/°C.

7. The adhesive layer of Claim 6, wherein the coefficient of thermal expansion is less than about 100 ppm/°C.

8. An integrated circuit package, comprising:

a die;

a die attach layer over the die; and

an array of solder balls over the die attach layer;

wherein the die attach layer has a coefficient of thermal expansion of less than about 106 ppm/°C.

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9. The integrated circuit package of Claim 8, further comprising a flexible tape connecting the array of solder balls to the die.

10. The integrated circuit package of Claim 8, wherein the die attach layer has a thickness of between about 5 and 7 mils.

11. The integrated circuit package of Claim 8, wherein the die attach layer is an epoxy modified with elastomeric material.

12. The integrated circuit package of Claim 8, wherein the package includes a ball grid array.

13. The integrated circuit package of Claim 8, wherein the package includes a tape ball grid array.

14. The integrated circuit package of Claim 8, wherein the package includes a micro ball grid array.

15. An integrated circuit package, comprising:

a die;

a die attach layer over the die; and

an array of solder balls over the die attach layer;

wherein the die attach layer has a coefficient of thermal expansion of less than about 106 ppm/°C and a modulus of elasticity of less than about 126 ksi.

16. The integrated circuit package of Claim 15, further comprising a flexible tape connecting the array of solder balls to the die.

17. A first level integrated circuit package, comprising:

a chip;

an array of solder balls for connecting the first level package to a second level package;

an adhesive layer between the chip and the array of solder balls, the adhesive layer having a coefficient of thermal expansion of less than about 200 ppm/°C; and

a flexible tape connecting the array to the chip.

18. The package of Claim 17, wherein the tape connects the array to the chip using μBGA technology.

19. The package of Claim 17, wherein the adhesive layer has a coefficient of thermal expansion of less than about 150 ppm/°C.

20. The package of Claim 17, wherein the adhesive layer has a coefficient of thermal expansion of less than about 100 ppm/°C.

21. A first level integrated circuit package, comprising:

a chip;

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an array of solder balls for connecting the first level package to a second level package;

an adhesive layer between the chip and the array of solder balls, the adhesive layer having a coefficient of thermal expansion of less than about 200 ppm/°C; and

a flexible tape connecting the array to the chip;

wherein the adhesive layer has a modulus of elasticity of greater than about 10 ksi and less than about 126 ksi.

22. The package of Claim 21, wherein the adhesive layer has a modulus of elasticity of greater than about 50 ksi.

23. The package of Claim 22, wherein the adhesive layer has a modulus of elasticity of greater than about 100 ksi.

24. A method of preventing breakage of a flexible tape bonded to a chip and connected to an array of solder balls, comprising:

providing a compliant material between the chip and array of solder balls, the material having a coefficient of thermal expansion of less than about 106 ppm/°C and a modulus of elasticity of less than about 126 ksi.

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25. An integrated circuit package, comprising:

a flexible substrate;

a chip;

a plurality of conductive terminals on the substrate;

a plurality of conductive leads electrically connecting the conductive terminals to the chip; and

a compliant material between the chip and the substrate, the compliant material having a modulus of elasticity of less than about 126 ksi at room temperature and a coefficient of thermal expansion of less than about 200 ppm/°C.The integrated circuit package of Claim 25, wherein the flexible substrate is a polyimide.

26. The integrated circuit package of Claim 25, wherein the plurality of conductive terminals includes an array of solder balls.

27. The integrated circuit package of Claim 25, wherein the plurality of conductive leads includes TAB leads.

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